Claim 4. (amended) The compound of claim 1, having the stereomeric conformation given in the general formula (2):

Please substitute the following claim 7 for the pending claim 7:

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Claim 7. (amended) A compound according to claim 1, wherein one or several of R1, R2,

R3, R4, R5, R6, R7, R8, R9, R10, R11 and R12 are selected to be methyl, whereas the rest is selected

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Please substitute the following claim 8 for the pending claim 8:)

Claim 8. (amended) A compound according to claim 1, wherein less than 6, preferably less than 5, more preferred less than 4 and preferably less than 2, and most preferred none of the R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11 and R12 are methyl.

Please substitute the following claim 10 for the pending claim 10:

Claim 10. (amended) A compound comprising one of the following sequences:

Ser-Ser-Ile-Ile-Ser-His-dPhe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-09) (SEQ ID NO:2),

Tyr-Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-30) (SEQ ID NO:3),

Tyr-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-31) (SEQ ID NO:4),

Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-Tyr-NH<sub>2</sub> (MS-32) (SEQ ID NO:5),

Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-33) (SEQ ID NO:6),

Thr-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-34) (SEQ ID NO:7),

Ser-Thr-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-35) (SEQ ID NO:9),

Ser-Ser-Val-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-36) (SEQ ID NO:10),

Ac-Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-38) (SEQ ID NO:11),

dSer-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-39) (SEQ ID NO:12),

NMeSer-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-40) (SEQ ID NO:13),

Ser-Ser-Ile-Ile-Ser-His-Phe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-40) (SEQ ID NO:13),

Ser-Ser-Ile-Ile-Ser-His-NMedPhe-Arg-Trp-Gly-Lys-Pro-Val-NH<sub>2</sub> (MS-42) (SEQ ID NO:15).

Please substitute the following claim 11 for the pending claim 11:

Claim 11. (amended) A compound according to claim 1, in which R20 is -CH<sub>2</sub>X, wherein X is aryl, substituted aryl, heteroaryl, substituted heteroaryl, phenyl or substituted phenyl, wherein the compound is capable of activating MC1-receptors.

Please substitute the following claim 12 for the pending claim 12:

Claim 12. (amended) A compound according to claim 1, in which R20 is  $-CH_2X$ , wherein X is aryl, substituted aryl, heteroaryl, substituted heteroaryl, naphthalene, or substituted naphthalene, wherein the compound is capable of blocking MC1-receptors.

Please substitute the following claim 13 for the pending claim 13:

Claim 13. (amended) A compound according to claim 1 which inhibits NO (nitric oxide) production, or the formation of nitrite.

Please substitute the following claim 14 for the pending claim 14:

Claim 14. (amended) A compound according to claim 1 which is immunomodulatory.

Please substitute the following claim 15 for the pending claim 15:

Claim 15. (amended) A compound according to claim 1 which ameliorates, prevents or inhibits contact hypersensitivity.

(Please substitute the following claim 16 for the pending claim 16:

Claim 16. (amended) A compound according to claim 1 which inhibits sensitization by a hapten, a preferred hapten being 2,4-dinitrofluorobenzene (DNFB).

Please substitute the following claim 17 for the pending claim 17:

Claim 17. (amended) A compound according to claim 1 which has an effect on induction of hapten tolerance, a preferred hapten being 2,4-dinitrofluorobenzene (DNFB).

Please substitute the following claim 18 for the pending claim 18:

Claim 18. (amended) A compound according to claim 1 which ameliorates, prevents or inhibits formation of oedema, in particular oedema associated with allergic reactions or inflammation.

Please substitute the following claim 19 for the pending claim 19:

Claim 19. (amended) A compound according to claim 1 which ameliorates, prevents or inhibits inflammation of blood vesseles or vasculitis.

Please substitute the following claim 20 for the pending claim 20:

Claim 20. (amended) A compound according to claim 1 which normalizes blood cell counts, said blood cell counts prior to administration of the compound deviating from the normal.

Please substitute the following claim 21 for the pending claim 21:

Claim 21. (amended) A compound according to claim 1, wherein the compound is capable of decreasing the formation of interleukin 1 (IL-1), interleukin 6 (IL-6), and/or tumour necrosis factor  $\alpha$  (TNF- $\alpha$ ), to afford decreased production of nitric oxide and/or to downregulate the activity of nitric oxide synthase (NOS).

Please substitute the following claim 22 for the pending claim 22:

Claim 22. (amended) A compound according to claim 1, wherein the compound is capable of stimulating the production of interleukin 8 (IL-8) and/or interleukin 10 (IL-10).

Please substitute the following claim 23 for the pending claim 23:

Claim 23. (amended) A compound according to claim 1, modified by exchanging carbon, nitrogen and oxygen atoms by other atom(s), preferably oxygen, carbon and hydrogen, respectively, so as to prevent or decelerate breakdown by proteases and/or peptidases.

Please substitute the following claim 24 for the pending claim 24:

Claim 24. (amended) An acid salt of the compound of claim 1.

Please substitute the following claim 25 for the pending claim 25:

Claim 25. (amended) A DNA molecule encoding a compound according to claim 1.

Please substitute the following claim 26 for the pending claim 26:

Claim 26. (amended) A vector comprising a DNA sequence encoding a compound according to claim 1.

Please substitute the following claim 27 for the pending claim 27:

Claim 27. (amended) A fusion protein comprising one or several copies of the sequence of a compound according to claim 1.

Please substitute the following claim 29 for the pending claim 29:

Claim 29. (amended) A pro-drug which upon administration to an animal or human is converted to or leads to the formation of a compound according to claim 1.

Please substitute the following claim 30 for the pending claim 30:

Claim 30. (amended) A pharmaceutical composition comprising a compound according to claim 1, or a DNA molecule coding therefor, or a vector comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof, together with a pharmaceutically acceptable carrier.

Please substitute the following claim 31 for the pending claim 31:

Claim 31. (amended) A method for inhibition of the formation of NO (nitric oxide), and/or for the inhibition of the formation of nitrite comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector

comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 32 for the pending claim 32:

Claim 32. (amended) A method for immunomodulation comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 33 for the pending claim 33:

Claim 33. (amended) A method for amelioration, prevention and/or inhibition of contact hypersensitivity comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 34 for the pending claim 34:

Claim 34. (amended) A method for inhibition and/or prevention of the sensitization by a hapten, the preferred hapten being 2,4-dinitrofluorobenzene (DNFB) comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector comprising the DNA molecule, or a fusion protein comprising one or several

copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 35 for the pending claim 35:

Claim 35. (amended) A method for affecting the induction of hapten tolerance, the preferred hapten being 2,4-dinitrofluorobenzene (DNFB) comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 36 for the pending claim 36:

Claim 36. (amended) A method for amelioration, prevention and/or inhibition of formation of oedema, in particular oedema associated with allergic reactions or inflammation comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 37 for the pending claim 37:

Claim 37. (amended) A method for amelioration, prevention and/or inhibition of inflammation of blood vessels or vasculitis comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector

comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 38 for the pending claim 38:

Claim 38. (amended) A method for normalization of white blood cell counts, said blood cell counts prior to administration of the compound deviating from the normal comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 39 for the pending claim 39:

Claim 39. (amended) A method for stimulation of cAMP comprising administering to a patient or healthy individual the compound according to claim 1, or a DNA molecule coding therefor, or a vector comprising the DNA molecule, or a fusion protein comprising one or several copies of the compound of claim 1, or a pro-drug which is converted upon administration to a compound of claim 1 or a fusion protein thereof.

Please substitute the following claim 40 for the pending claim 40:

Claim 40. (amended) A method for treating a disease comprising inflammation or an inflammatory like condition comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 41 for the pending claim 41:

Claim 41. (amended) A method for treating a disease or condition caused by or associated with one or more of the following: allergy, hypersensitivity, bacterial infection, viral infection, inflammation caused by toxic agent, fever, autoimmune disease, radiation damage by any source including UV-radiation, X-ray radiation,  $\gamma$ -radiation,  $\alpha$ - or  $\beta$ -particles, sun burns, elevated temperature, mechanical injury and hypoxia, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 42 for the pending claim 42:

Claim 42. (amended) A method for treating an inflammatory disease of the skin (including the dermis and epidermis) of any origin, such as skin diseases having a inflammatory component, in particular contact dermatitis of the skin, sunburns of the skin, burns of any cause, inflammation of the skin caused by chemical agent, psoriasis, vasculitis, pyoderma gangrenosum, discoid lupus erythematosus, eczema, pustulosis palmo-plantaris, and phemphigus vulgaris, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 43 for the pending claim 43:

Claim 43. (amended) A method for treating an inflammatory disease in the abdomen, including an abdominal disease having an inflammatory component, such as gastritis, including one of unknown origin, gastritis perniciosa (atrophic gastritis), ulcerous colitis (colitis ulcerosa), morbus Crohn, systemic sclerosis, ulcus duodeni, celiac disease, oesophagitis and ulcus ventriculi, the

method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 44 for the pending claim 44:

Claim 44. (amended) A method for treating a disease or condition that requires immunomodulatory treatment or a disease or condition which is a systemic or general and/or local immunological disease or condition, such as one of an autoimmune nature, and other inflammatory disease of a general nature, in particular rheumatoid arthritis, psoriatic arthritis, systemic sclerosis, polymyalgia rheumatica, Wegener's granulomatosis, sarcoidosis, eosinophilic fasceitis, reactive arthritis, Bechterew's disease, systemic lupus erythematosus, arteritis temporalis, Behcet's disease, morbus Burger, Good Pastures' syndrome, eosinophilic granuloma, fibromyalgia, myositis, and mixed connective tissue disease, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 45 for the pending claim 45:

Claim 45. (amended) A method for treating a disease or condition of the peripheral and central nervous system related to inflammation, such as cerebral vasculitis, multiple sclerosis, autoimmune ophtalmitis and polyneuropathia, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 46 for the pending claim 46:

Claim 46. (amended) A method for treating a disease or condition of the eye and tear glands related to inflammation, such as anterior and posterior uveitis, retinal vasculitis, opticus neuritis, Wegener's granulomatosis, Sjögren's syndrome, episcleritis, scleritis, sarcoidosis affecting the eye and polychondritis affecting the eye, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 47 for the pending claim 47:

Claim 47. (amended) A method for treating a disease or condition of the ear related to inflammation, such as polychondritis affecting the ear and external otitis, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 48 for the pending claim 48:

Claim 48. (amended) A method for treating a disease or condition of the nose related to inflammation, such as sarcoidosis, polychondritis and mid-line granuloma of the nose, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 49 for the pending claim 49:

Claim 49. (amended) A method for treating a disease or condition related to inflammation of the mouth, pharynx and salivary gland, such as Wegener's granulomatosis, mid-line granuloma, Sjögren's syndrome and polychondritis in these areas, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 50 for the pending claim 50:

Claim 50. (amended) A method for treating a disease or condition related to inflammation in the lung, such as idiopathic alveolitis, primary pulmonary hypertension, bronchitis, chronic bronchitis, sarcoidosis, alveolitis in inflammatory systemic disease, pulmonary hypertension in inflammatory systemic disease, Wegener's granulomatosis and Good Pastures' syndrome, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 51 for the pending claim 51:

Claim 51. (amended) A method for treating a disease or condition related to the inflammation of the heart, such as pericarditis, idiopathic pericarditis, myocarditis, Takayasus' arteritis, Kawasaki's disease, coronary artery vasculitis, pericarditis in inflammatory systemic disease, myocarditis in inflammatory systemic disease, endocarditis and endocarditis in inflammatory systemic disease, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 52 for the pending claim 52:

Claim 52. (amended) A method for treating a disease or condition related to inflammation of the liver, such as hepatitis, chronic active hepatitis, biliary cirrhosis, hepatic damage by toxic agent, interferon induced hepatitis, hepatitis induced by viral infection, liver damage induced by anoxia and liver damage caused by mechanical trauma, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 53 for the pending claim 53:

Claim 53. (amended) A method for treating a disease or condition related to inflammation of the endocrine or exocrine pancreas, such as of diabetes mellitus including its prevention and late complications, acute pancreatitis and chronic pancreatitis, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 54 for the pending claim 54:

Claim 54. (amended) A method for treating a disease or condition related to the inflammation of the thyroidea, such as thyreoiditis, autoimmune thyreoiditis, Hashimoto's thyreoiditis, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 55 for the pending claim 55:

Claim 55. (amended) A method for treating a disease or condition related to inflammation of the kidney, such as glomerulonephritis, glomerulonephritis in systemic lupus erythematosus, periarteritis nodosa, Wegener's granulomatosis, Good-Pastures' syndrome, HLAb27 associated diseases, IgA nephritis (IgA = Immunoglobuline A), pyelonephritis, chronic pyelonephritis and interstitial nephritis, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

[ Please substitute the following claim 56 for the pending claim 56: ]

Claim 56. (amended) A method for treating a disease or condition related to the inflammation of the joints such as Bechterew's disease, psoriatic arthritis, rheumatoid arthritis, arthritis in colitis ulcerosa, arthritis in morbus Crohn, affection of joints in systemic lupus erythematosus, systemic sclerosis, mixed connective tissue disease, reactive arthritis, Reiter's syndrome, arthrosis of any joint, in particular arthrosis of finger joints, the knee and the hip, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 57 for the pending claim 57:

Claim 57. (amended) A method for treating a disease or condition related to the inflammation of blood vessels, such as arteritis temporalis, periarteritis nodosa, arteriosclerosis, Takayasus' arteritis and Kawasaki's disease, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 58 for the pending claim 58:

Claim 58. (amended) A method for affording protection against and prevention of arteriosclerosis, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 59 for the pending claim 59:

Claim 59. (amended) A method for treatment of drug induced disorders of the blood and lymphoid system, such as drug induced hypersensitivity (including drug hypersensitivity) affecting blood cells and blood cell forming organs (e.g. bone marrow and lymphoid tissue), in particular anaemia, granulocytopenia, trombocytopenia, leukopenia, aplastic anaemia, autoimmune haemolytic anaemia, autoimmune thrombocytopenia, autoimmune granulocytopenia, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 60 for the pending claim 60:

Claim 60. (amended) A method for treating a disease or condition related to fast allergic disorders (Type I allergy) such as anaphylactic reactions, anaphylactoid reactions, asthma, asthma of allergic type, asthma of unknown origin, rhinitis, hay fever and pollen allergy, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 61 for the pending claim 61:

Claim 61. (amended) A method for treating a disease or condition related to infections of any origin, preferably treatment of inflammation secondary to infection caused by virus, bacteria, helminths and protozoae, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

(Please substitute the following claim 62 for the pending claim 62:)

Claim 62. (amended) A method for treating a disease or condition related to trauma and tissue injury of any origin, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 63 for the pending claim 63:

Claim 63. (amended) A method for stimulating pigment formation in epidermal cells, such as skin tanning for cosmetic reasons, for treatment of vitiligo, or any other condition where darkening of skin color is desired, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.

Please substitute the following claim 64 for the pending claim 64:

Claim 64. (amended) A method for inhibiting pigment formation in cells of the skin, the method comprising the administration of a pharmacologically effective amount of a compound according to claim 1 to a patient or a healthy individual.